CLAIMS

I claim:

1. An outside air damper recycling control system for an air conditioning system, comprising:

a) an air conditioning system having a fan to distribute conditioned air in an interior space;

b) a damper for directing outside air into a duct;

c) wherein said duct is connected to an air intake duct of said air conditioning system;

d) a means for controlling the operation of said damper, wherein said means for controlling includes a timer; and

e) a means for controlling said air conditioning system and the fan, whereby said means for controlling said air conditioning system and the fan operates independently of said means for controlling the operation of said damper.

2. The outside air damper recycling control system of claim 1, further comprising

a) an intake fan, installed in said duct; and

b) a means for controlling said intake fan.

3. The outside air damper recycling control system of claim 1, wherein the air conditioning system includes at least one of: a cooling means, a heating means, and an air cleaning means.

4. The outside air damper recycling control system of claim 1, wherein the air conditioning system includes a forced air heating system.

5. The outside air damper recycling control system of claim 1, wherein the damper includes a motorized control to open and close the damper.

6. The outside air damper recycling control system of claim 1 further comprising:

a) a smoke detector, installed in said duct; and

b) a means for overriding said means for controlling the operation of said outside air damper recycling control system, in operable communication with said smoke detector.

7. A method of mixing air in an interior space when not conditioning the air by an air conditioning system having a return air duct a circulation fan, and a thermal conditioning element, an outside air damper connected to an external air duct, an outside air intake fan, installed in said external air duct, the external air intake duct being connected to the return air duct of the air conditioning system, comprising the steps of:

a) activating said outside air damper and said circulation fan for a pre selected operating time, independent of said thermal conditioning element;

b) pulling outside air into said external air duct;

c) mixing said outside air into the return air duct of said air conditioning system, producing a quantity of mixed air;

d) distributing the mixed air into a closed space;

e) shutting down the circulation fan after a predetermined operating time;

f) keeping the circulation fan shut down for a pre-selected quiescent time; and

g) repeating steps a-f for an extended period of months.

8. The method of claim 7, further including: the step of closing the damper when the circulation fan is shut down.

9. The method of claim 7, wherein the air conditioning system includes at least one of: a cooling means, a heating means, and an air cleaning means.

10. The method of claim 7, wherein the air conditioning system further includes a thermostat.

11. The method of claim 10, further comprising the steps of

a) setting said thermostat to a desired room temperature setting;

b) connecting said thermostat to an operating control for said thermal conditioning element;

c) operating said thermal conditioning element when said desired room temperature varies from the desired room temperature setting;

d) causing said circulating fan to operate independently of said pre-determined operating time; and

e) shutting down said thermal conditioning element when said desired room temperature setting is reached.

12. The method of claim 11, further comprising the steps of:

a) determining the status of the predetermined operating time; and

b) shutting down the circulating fan if the predetermined operating time is the quiescent predetermined operating time; or

c) operating said circulating fan if the predetermined operating time is the operating predetermined operating time.

13. The method of claim 7, wherein the air conditioning system further comprises a damper motor.

14. The method of claim 13, further comprising the steps of:

a) causing said damper motor to open said damper at said pre-determined operating time; and

b) causing said damper motor to close said damper at said pre-determined quiescent time.

15. The method of claim 7, wherein the air conditioning system further comprises a smoke detector, installed in said duct, and a means for overriding said means for controlling the operation of said duct in operable communication with said smoke detector.

16. The method of claim 15, further comprising the steps of:

a) causing said air conditioning system to shut down upon detection of smoke in said duct by said smoke detector.

17. An outside air damper recycling control system for an air conditioning system, comprising:

a) an air conditioning system having a return air duct and an air conditioning apparatus including at least one of: a heating apparatus, a cooling apparatus, and an air cleaning apparatus for providing conditioned air;

b) a circulating fan, in operable communication with said air conditioning system to distribute conditioned air to an interior space;

c) a thermostat for activating and deactivating said air conditioning apparatus and the circulating fan;

d) an outside air duct connecting outside of a building to return air duct;

e) an outside air damper in the outside air duct;

f) an intake fan installed in said outside air duct; and

g) a timer in operable communication with a control system, said timer having an operating state and a quiescent stage whereby when said timer is in said operating state, said control system causes said the outside air damper to open, and causes said circulation fan to operate, and when said timer is in said quiescent state, said control system causes said damper to close and said circulation fan to cease operating.

18. The outside air damper recycling control system for an air conditioning system of claim 17 wherein said thermostat is operably connected to said control system to operate said circulating fan and said air conditioning apparatus independent of said timer.

19. The outside air damper recycling control system for an air conditioning system of claim 17 wherein said control system further operates said intake fan to

operate when said timer is in said operating state, and the control system causes said intake fan to cease operating when said timer is in said quiescent state.

20. The outside air damper recycling control system for an air conditioning system of claim 17 further comprising:

a) a smoke detector, installed in said outside air duct; and

b) a means for overriding the operation of said outside air damper recycling control system, in operable communication with said smoke detector.